AVEVAWORLD

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APRIL 8, 2025

Visualizing your operations data with AVEVA™ PI Vision™

Amit Dutta, Senior Product Manager, AVEVA

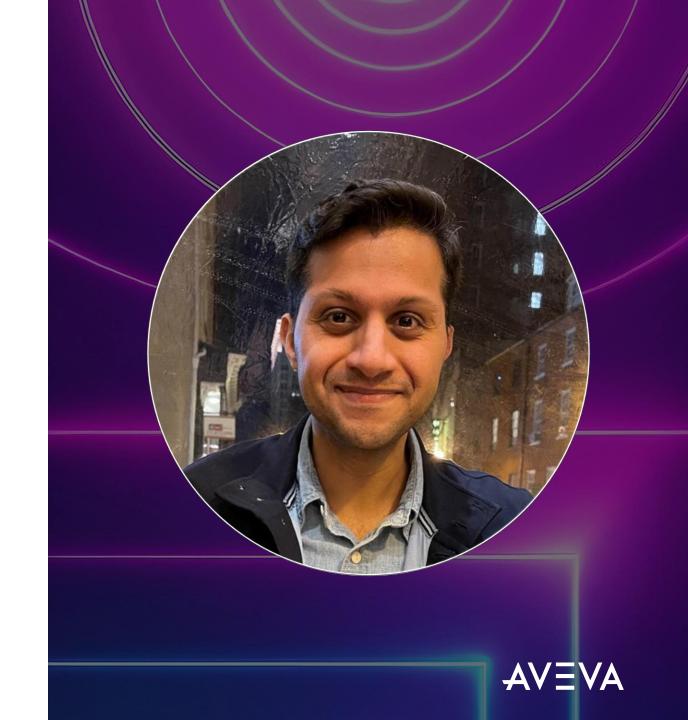


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AVEVA WORLD 2025

Agenda

Visualizing your operations data with AVEVA PI Vision

Moscone West Center San Francisco Product vision and goals

PI Vision overview

Roadmap overview

Recent releases

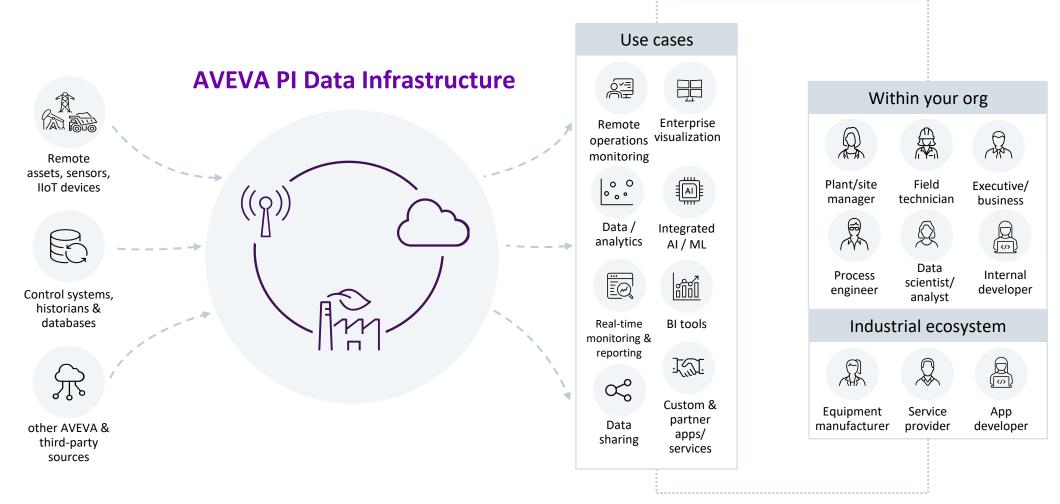
PI Vision 2025 preview

Next steps



Hybrid data infrastructure

From edge to plant to community





AVEVA PI Vision

The fastest, easiest way to visualize AVEVA PI Server data

- An easy to use, self-service,
 scalable solution
- Access data from any web browser, including mobile device browsers
- Organize and share displays across your organization





Gain visibility into operations

Operations data visualization outcomes for industrial organizations



Rapid response

University of Maryland reduced electrical outage response times from up to 90 minutes to almost instantaneous



Collaboration

Algoma Steel users built over **1,500 displays** to provide deeper insights shared across departments



Self-service

One user at ADM visualized over 550 assets' data in one display in **less than 10 minutes**

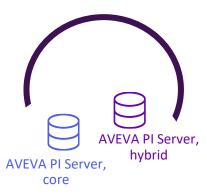
University of Maryland, College Park

Algoma Steel

<u>ADM</u>



Powerful capabilities delivered over time





Claims-based authentication (admin site & display utility)

Advanced Tag Search

2023 SP1

2023

Claims-based authentication (main site)

Enhanced events analysis & display standardization

Asset-based calculations & offline display management

2022

Time series table symbol Bulk edit symbols Font and font size



In development



2025

New process monitoring and display management capabilities

Supporting end users and PI Admins

2021

2020 Tag-based calculations & display usage monitoring

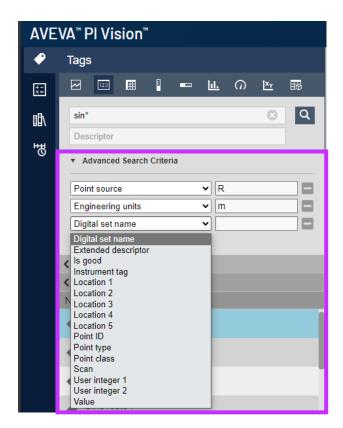


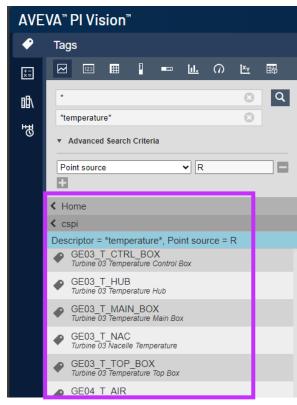
Advanced tag search in AVEVA PI Vision 2023 SP1



Streamline finding the right tags with advanced search features

Released Jan 2024





Features

- Filter by multiple tag attributes at the same time
- Select operator symbols for filtering on a relevant attribute
- View description alongside tag name in tag search results
- View current tag value and timestamp on hover in search results

Benefits

- Streamline finding the right tags, even when tag names lack standard conventions, mismatch the source system, or have similarities with other tags
- Quickly narrow and interpret tag search results
- Easily differentiate between recent tags and similar archived tags

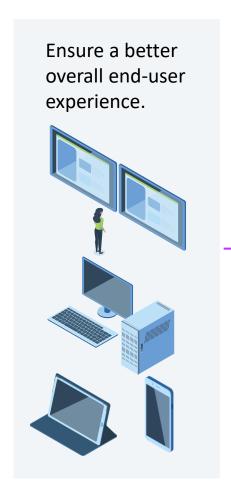


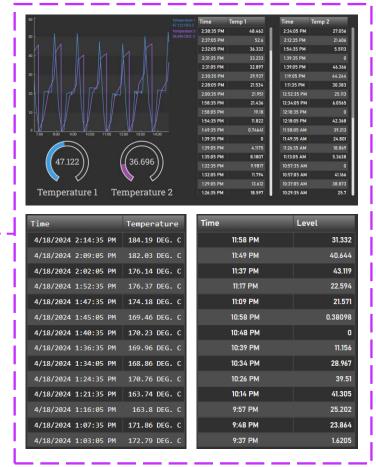
AVEVA PI Vision 2024 overview



Addressing critical visualization needs

Released Nov 2024





Feature highlights

- New time-series table symbol
- Configurable font and font size on all AVEVA PI Vision symbols
- Ability to bulk edit multiple symbols on a display
- Improved display sorting and tabular view of displays
- Granular folder and display permissions
- Additional multi-state capabilities

Addressing 20+ enhancements requests from the AVEVA™ PI System™ Feedback Portal, spanning 2500+ votes



View recorded values from AVEVA PI Server

New time-series table symbol

- View recorded PI tag values and timestamps over a specified time range
- Can be configured to show fixed number of values
- Supports multi-state configuration

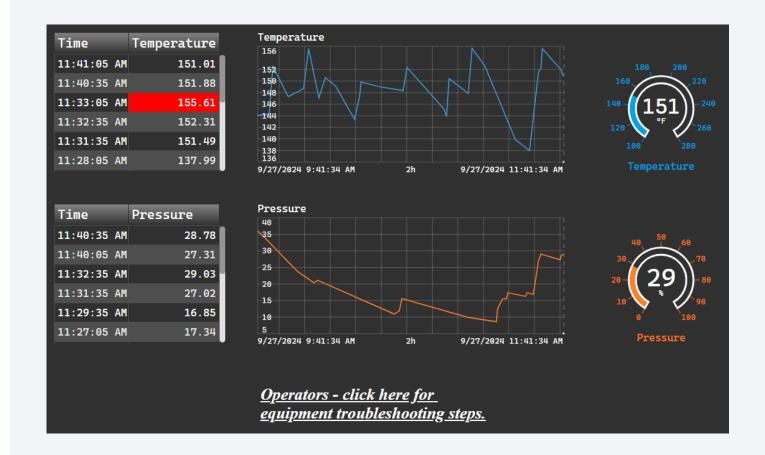
| Time | Temperature | | |
|-------------|-------------|--|--|
| 10:14:05 AM | 82.5 | | |
| 10:13:35 AM | 84.8 | | |
| 10:09:35 AM | 84.3 | | |
| 10:08:35 AM | 91.0 | | |
| 10:07:35 AM | 92.6 | | |
| 10:04:35 AM | 92.8 | | |
| 9:29:05 AM | 82.0 | | |
| 9:19:05 AM | 77.2 | | |
| 9:18:35 AM | 79.6 | | |
| 9:17:35 AM | 81.4 | | |
| 9:17:05 AM | 86.7 | | |
| 9:13:35 AM | 85.9 | | |
| 8:57:35 AM | 78.7 | | |
| | | | |

| Time | Temperature | | | | |
|----------------------|---------------|--|--|--|--|
| 4/18/2024 2:14:35 PM | 184.19 DEG. C | | | | |
| 4/18/2024 2:09:05 PM | 182.03 DEG. C | | | | |
| 4/18/2024 2:02:05 PM | 176.14 DEG. C | | | | |
| 4/18/2024 1:52:35 PM | 176.37 DEG. C | | | | |
| 4/18/2024 1:47:35 PM | 174.18 DEG. C | | | | |
| 4/18/2024 1:45:05 PM | 169.46 DEG. C | | | | |
| 4/18/2024 1:40:35 PM | 170.23 DEG. C | | | | |
| 4/18/2024 1:36:35 PM | 169.96 DEG. C | | | | |
| 4/18/2024 1:34:05 PM | 168.86 DEG. C | | | | |
| 4/18/2024 1:24:35 PM | 170.76 DEG. C | | | | |
| 4/18/2024 1:21:35 PM | 163.74 DEG. C | | | | |
| 4/18/2024 1:16:05 PM | 163.8 DEG. C | | | | |
| 4/18/2024 1:07:35 PM | 171.86 DEG. C | | | | |
| 4/18/2024 1:03:05 PM | 172.79 DEG. C | | | | |



Increased visibility of symbols and displays

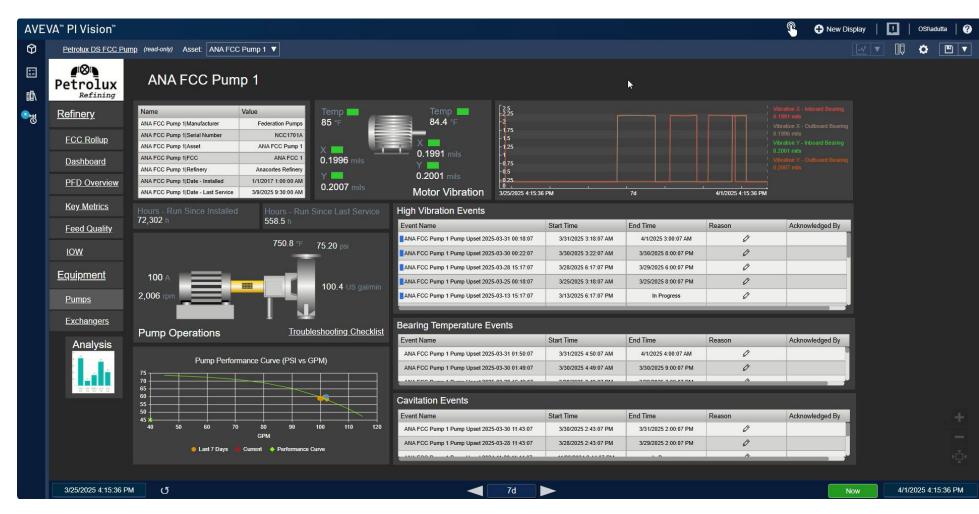
- Font and font size selection available on all symbols
- New rich text editor for the static text symbol
- Display zoom level preserved for each user





Bulk edit symbols on a display

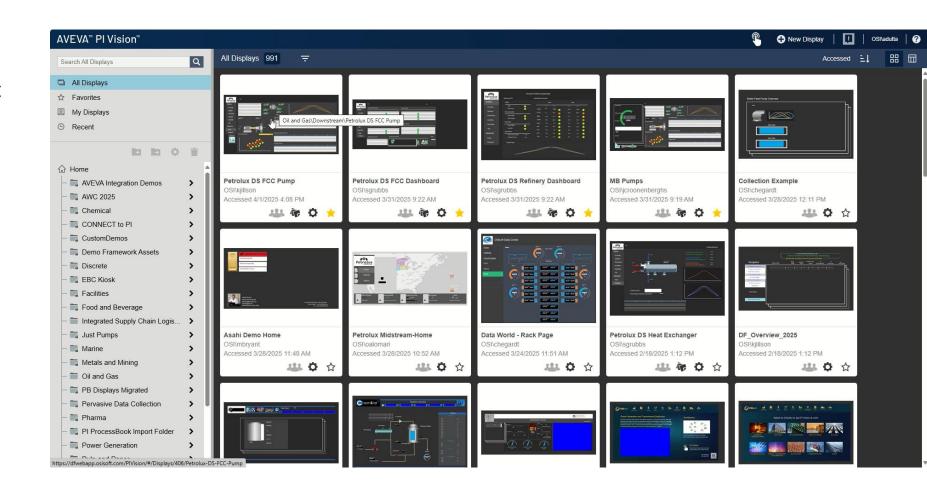
- Select multiple symbols on a display and configure them together
- Reduce the time to build complex displays
- Configure symbols to use the same properties





Home page enhancements and folder permissions

- Sort displays by name, owner, last modified, or last accessed
- Tabular view of displays
- Access AVEVA PI Vision folders directly via URL
- More granular folder and display permissions model





View connected users

AVEVA™ PI Vision™ Administration

OSI\adutta

Overview

Configuration

Security

Display Defaults

User Settings

Display Management

Reports

Display Sessions

Display Sessions (10) C Last refresh: 09/26/24 11:05:32 AM

| ID† | Name | User ID | Opened | Updated | First | Latest | Min | Max | Avg | Session ID |
|-----|---------------------------------------|------------------|----------------------|-----------|-------|--------|-------|-------|-------|--------------------------------------|
| -1 | New Unsaved Display | OSI\jswartzentru | 09/26/24 10:46:22 AM | 913ms ago | 471ms | 18ms | 2ms | 5s | 193ms | 7f58a632-0547-4d33-bdb5-b1a7125c3616 |
| 2 | SLTC - Asset Displays - AC RTU Displa | OSI\adutta | 09/26/24 11:05:25 AM | 2s ago | 3s | 77ms | 77ms | 3s | 1s | 35f101ea-7364-4790-9883-fb3bf30df7d8 |
| 6 | SLTC - Asset-Displays - Device-View | OSI\eschwamm | 09/26/24 10:51:50 AM | 3s ago | 1s | 2ms | 2ms | 1s | 18ms | 1fbbfc14-37f7-48e7-abb7-3c60dd2ecfc0 |
| 11 | SLTC - Energy Management | OSI\avv-croman | 09/26/24 10:54:43 AM | 2s ago | 978ms | 151ms | 147ms | 978ms | 174ms | 433b05b4-fb82-4da5-ba9e-414a5142b8c8 |
| 15 | SLTC - Energy Management Overview | OSI\aalisha | 09/26/24 10:51:59 AM | 913ms ago | 152ms | 151ms | 145ms | 323ms | 160ms | 46c7ca3d-2795-4777-80ae-682558fe965c |
| 26 | SLTC - Fault and Site Management - C | OSI\aalisha | 09/26/24 10:52:46 AM | 913ms ago | 774ms | 462ms | 437ms | 866ms | 486ms | a3b0713a-c0d9-435e-b850-23befb452c1b |
| 71 | Compressor State Changes | OSI\eschwamm | 09/26/24 10:50:50 AM | 913ms ago | 566ms | 2ms | 1ms | 846ms | 93ms | c8610278-c8cb-47e1-8f5f-73524c93716b |
| 82 | Wind Farm Overview | OSI\lposner | 09/26/24 10:48:35 AM | 5s ago | 455ms | 11ms | 6ms | 455ms | 12ms | e3d7c790-8843-4d6e-81e5-084def87f4b0 |
| 87 | Generator Overview | OSI\jdryden | 09/26/24 10:52:21 AM | 3s ago | 312ms | 4ms | 4ms | 820ms | 29ms | 830858c0-a7d0-4e00-a41f-674bdbb41818 |
| 87 | Generator Overview | OSI\jswartzentru | 09/26/24 10:45:23 AM | 5s ago | 3s | 10ms | 4ms | 3s | 43ms | e530345f-81b9-4e22-b02c-fdff289f65a4 |

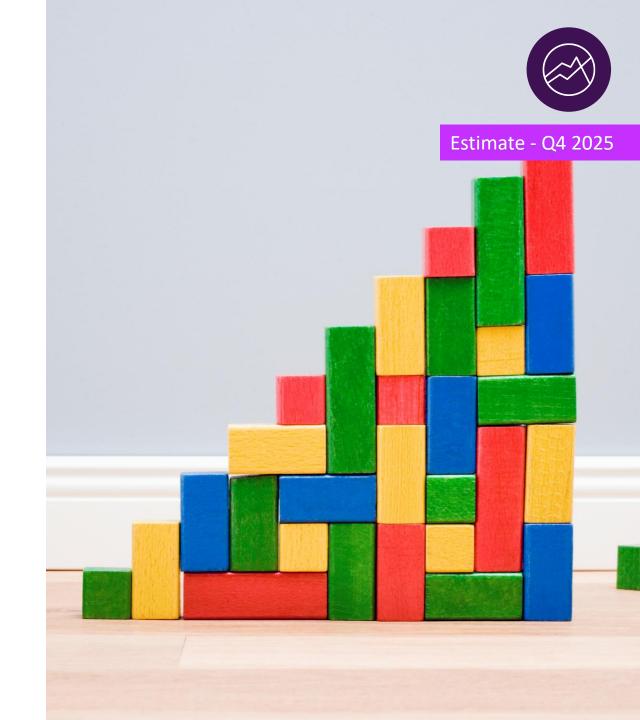


AVEVA PI Vision 2025 preview

Features planned and in development for the upcoming PI Vision 2025 release

- Cloud SQL support
- Collection sorting enhancements
- Ad hoc workspace improvements
- Tooltip configuration
- Display revisions
- Trend and table symbol enhancements
- ...and much more!

For full details, see the Feedback Portal to stay up to date as enhancement requests update in status.

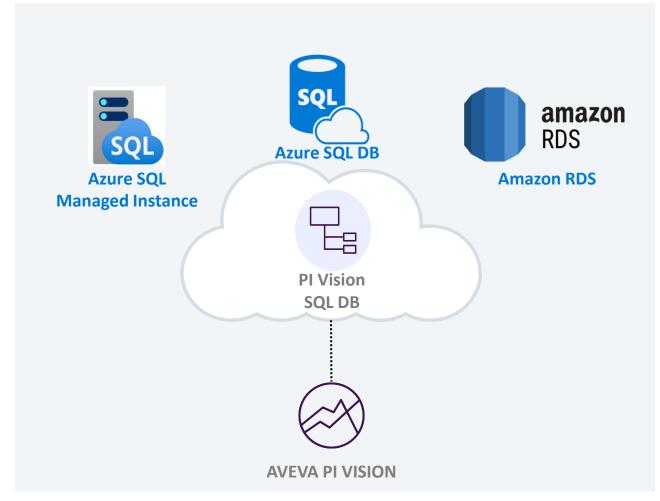


Hybrid infrastructure options

COMING

Leverage cloud-managed SQL

- Cloud-based SQL hosting options from Azure SQL DB to Azure SQL Managed Instance and Amazon Relational Database Service (RDS)
- Standardize SQL workloads on cloud provider of choice
- Decrease admin work so staff can focus on operations data value
- Ease cloud migration and offload SQL admin tasks to Microsoft Azure
- Lower costs from IT overhead and on-demand usage with more automation



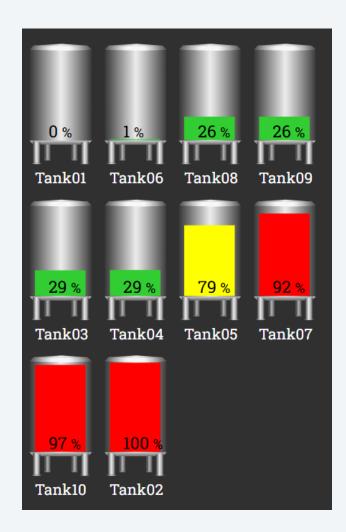


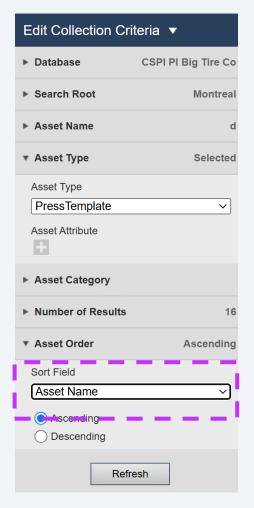
View assets in priority order

Collections enhancements

- Collections can now be sorted by an attribute value – meaning users can see the most critical assets in order
- Sort on any available attribute from an asset type







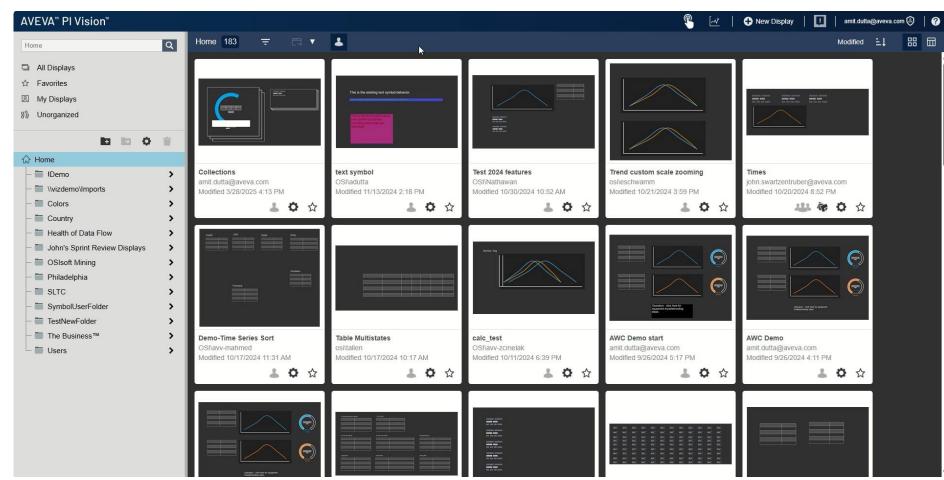


The quickest way to explore your data



Ad hoc workspace enhancements

- Workspace accessible at an application level means users don't need to open or create a display to view data
- Search pane directly available in the workspace
- URL access allows users to navigate directly to the workspace





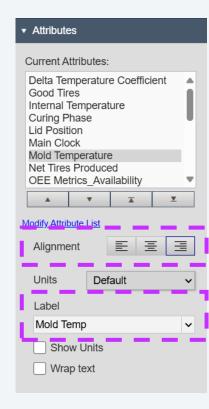
Improve usability of tables



Table enhancements

- Ability to transpose Asset Comparison Table, making it easier to view many attributes
- Label configuration options on all tables
- Alignment configuration options on all tables

| Attribute | HOU.Press.01 | HOU.Press.02 | HOU.Press.03 | HOU.Press.04 |
|--------------------------|--------------|---------------------|--------------|--------------|
| Delta Temperature Coeff | 0 | 0 | 0 | 0 |
| Good Tires | 0 | 0 | 0 | 0 |
| Internal Temperature | 0 | 0 | 0 | 0 |
| Curing Phase | Waiting | Waiting | Waiting | Waiting |
| Lid Position | Open | Open | Open | Open |
| Main Clock | 78.997 | 73.024 | 82.228 | 71.304 |
| Mold Temperature | 39.991 | 39.697 | 39.151 | 38.207 |
| Net Tires Produced | 88 | 102 | 96 | 90 |
| OEE Metrics_Availability | 43.452 | 41.886 | 42.506 | 50.56 |
| OEE Metrics_OEEScore | 18.847 | 16.275 | 18.436 | 23.757 |
| OEE Metrics_Performan | 51.506 | 47.892 | 48.795 | 57.831 |
| OEE Metrics_Quality | 84.211 | 81.132 | 88.889 | 81.25 |
| Press Status | Maintenance | Planned Maintenance | Maintenance | Press set-up |
| Pressure | 0 | 0 | 0 | 0 |
| Production Rate | 4 | 5 | 3 | 3 |
| Production Rate_GoodN | 48 | 43 | 48 | 52 |
| Production Target | 12 | 12 | 12 | 12 |
| Reference Type | F1 | Truck | Truck | Truck |



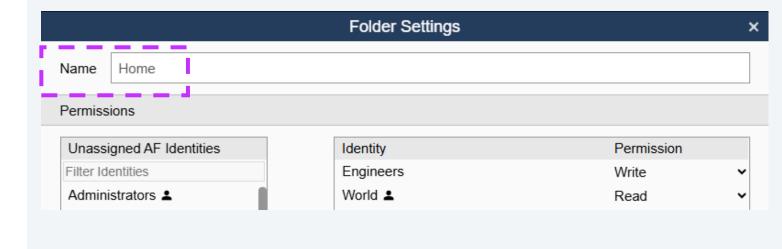


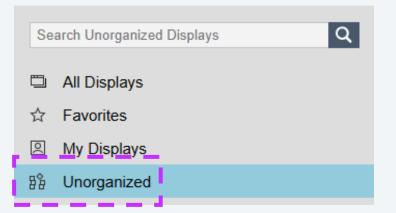
Curated Home folder experience

Permission configuration on the home folder

- Control who has read and write permissions to the home folder
- Gives admins the ability to control what displays end users see when they navigate to the home folder
- A new category of unorganized displays that are not parented in a folder or home.









YOU shape our roadmap

AVEVA PI System Feedback Portal is your platform to tell us what you want, and we have been listening!

AVEVA PI Vision 2024 includes 20+ new enhancements based on 2500+ votes from AVEVA PI System Feedback Portal.



https://feedback.aveva.com

Let us know your product feedback!



Visit us!

Stop by these booths in the Innovation Zone for demos and additional information:

Extend value through
AVEVA PI Data Infrastructure
in the CONNECT area

Transform real-time data into actionable information with AVEVA PI Server in the Operate & Optimize area

Visualize your operations data with AVEVA PI Vision

in the Operate & Optimize area



AVEVA PI System sessions

Fueling your data infrastructure with AVEVA connectivity

Tuesday, April 08 @ 2:00 pm Room 2005-2007

Establishing your modern data infrastructure with AVEVA PI Server

Tuesday, April 08 @ 4:30 pm Room 2001-2003

Supporting expanding needs with AVEVA PI Vision

Wednesday, April 09 @ 2:30 PM Room 2000



New! Industrial Intelligence Insider Newsletter

Stay up to date with the latest product news on AVEVA and CONNECT

Each issue includes:

- Key industry insights & trends
- Product release updates
- Event details
- And more!







Questions?



Please wait for the microphone.

State your name and company.

Please remember to...

Navigate to this session in the mobile app to complete the survey.

Visit us in the Innovation Zone.

Thank you!



Innovation zone

Exciting, modern & engaging experience

5 key zones: CONNECT, operate & optimize, design & build, industrial sustainability, experiential zone (hands-on activities)

45+ sponsor and exhibitor booths

CONNECT ecosystem partner kiosk

Partner solution sessions

Guided tours by industry

Game and leisure areas



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Over 20,000 enterprises in over 100 countries rely on AVEVA to help them deliver life's essentials: safe and reliable energy, food, medicines, infrastructure and more. By connecting people with trusted information and AI-enriched insights, AVEVA enables teams to engineer efficiently and optimize operations, driving growth and sustainability.

Named as one of the world's most innovative companies, AVEVA supports customers with open solutions and the expertise of more than 6,400 employees, 5,000 partners and 5,700 certified developers. The company is headquartered in Cambridge, UK.

Learn more at www.aveva.com

